

**Libraries for All
Quality Assurance Review #5
Central Library**

February 13, 2003

**Project Team: Megumi Sumitani, Assistant City Auditor
Patti Jones, CDR Consultants, Inc.**

City Auditor: Susan Cohen

City of Seattle

700 Fifth Avenue, Suite 2410
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Office of City Auditor

Memorandum

Date: February 13, 2003

To: Alex Harris, Capital Program Director
Libraries for All

From: Susan Cohen, City Auditor
Patti Jones, CDR Consultants, Inc.
Megumi Sumitani, Assistant City Auditor

Subject: Libraries for All Quality Assurance Review #5 – Central Library

EXECUTIVE SUMMARY

The purpose of the review is to provide stakeholders with an assessment of how the project is progressing in terms of scope, schedule, and budget. This memorandum documents our fifth Quality Assurance Review (Review) on the Central Library portion of the Libraries for All (LFA) Capital Program.

Overall, the Audit Office finds that there are opportunities for the Library and Seneca to improve their management of the Central Library project. Most importantly, we would like to see the Library:

- (1) provide an analysis to their oversight bodies weighing the risks, costs and benefits inherent in the contractor's proposed schedule to meet the move-out date of the temporary facility as compared to the contractor's original estimate of time and sequencing required for project components;
- (2) conduct extensive schedule delay analyses to ensure it can articulate the causes of schedule slippages throughout the project duration; and
- (3) ensure close adherence to contractual provisions and procedures regarding change orders.

These last two items are needed to protect the City from potential significant cost overruns that could occur if there were to be "end-of-project" claims arising from the schedule delays that have occurred thus far on the project.

Methodology

This review is generally consistent with the Audit Office's format for quality assurance reviews of capital projects wherein the Review serves as a "snapshot" of the project at a specific time over its life span. Our fifth Review spans the time frame from May 2002 through approximately December 15, 2002. The Review was conducted by Patti Jones, CDR Consultants, Inc., with assistance from Megumi Sumitani, Assistant City Auditor.

Several meetings have taken place since Review #4. These meetings were initiated to develop a clear understanding of the project budget/contingency, value engineering issues, and change order evaluation processes. The supporting data attached to the Executive Summary was prepared entirely from Seneca and the contractor's (Hoffman Construction Company's) data. No changes/additions/deletions were made to the raw data provided to the Audit Office.

Summary of Findings

The Audit Office's findings discuss the following project matters:

1. Project Schedule
2. Remaining Contingency (budget)
3. Change Order Proposals (COPs)
4. Value Engineering Change Proposals (VECPs)

1. PROJECT SCHEDULE

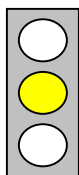
As of the contractor's November 2002 construction schedule, the project has suffered an overall 4 month delay. (See Attachment 1.) Thus far the baseline planned project schedule has been impacted by underground tank removal; delayed notice to proceed (NTP); shoring permit approvals issued later than planned; delays to the excavation shoring work due to an alleged differing soils condition; and delays to the steel fabrication.

Critical Schedule Slippages include:

	<u>Plan</u>	<u>Actual/Forecast</u>	<u>Slippage</u>
Start of Structural Steel:	10JUN02	09DEC02	6 Months
Complete CW & Bldg Enclosure:	26FEB03	28OCT03	8 Months
Substantial Completion (TCof O):	16JUL03	12NOV03	4 Months
Start Owner Move-in:	17JUL03	13NOV03	4 Months
Final Completion (CofO):	30SEP03	03FEB04	4Months

Project Schedule Concern #1: As of the November 2002 schedule, LFA's planned move-in start date is November 13, 2003 following receipt of the temporary certificate of occupancy. Obtaining the temporary certificate of occupancy is contingent upon the completion of the curtain wall and building enclosure (October 28, 2003), fire and life safety systems, etc. Based on the planned start date for the move-in, the Library has approximately 6 weeks to complete its move from the leased temporary library space.

Project Schedule Concern #2: The baseline schedule originally showed only minor punchlist work being performed after Substantial Completion, but the November 2002 schedule update shows significantly more work (i.e., site work, interior finish work at Level 11, and punchlist items throughout the building) being completed after achieving Substantial Completion. (See Attachment 2.)



Audit Office Opinion on Project Schedule Concerns #1 and #2:

Project Schedule Concern #1: It will be extremely challenging to complete the move-out before December 31, 2003 when the Temporary Facility's lease expires. The Library should develop contingency plans and funding in case it is necessary to extend its present lease.

Project Schedule Concern #2: According to the contractor's November 2002 schedule, a significant amount of finish work and commissioning of the building is shown to be occurring at the same time the Library will be moving in.

The Audit Office's concerns due to these two activities occurring concurrently are twofold: (1) the risk that the New Library's operation and/or availability of Library functions will be limited until final completion, and (2) the risk of a potentially complicated and lengthy project closeout and completion.

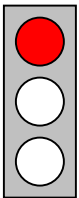
Project Schedule Concern #3: A majority of the interior finish work will be performed while the building has not been fully closed in. The Baseline Schedule indicated the curtain wall and building enclosure work was to have been completed nearly 5 months prior to interior finish work at floors 3-11. The November 2002 schedule shows that the curtain wall and building enclosure will not be completed until 1 month before all finish work at floors 3-11 is completed. In general, the current schedule shows all work being performed in a concurrent rather than the more sequential manner that was originally planned by Hoffman.

Project Schedule Concern #4: Change Order Proposals (COPs) related to schedule have recently been agreed to for time (not necessarily cost) impacts. These include:

- | | | |
|----|--------------------------------------------------|----------------|
| a. | COP 41 – Schedule delay due to late NTP: | 10 days |
| b. | COP 24 – Arrest movement of 5 th Ave. | 28 days |
| | only for delays related to shoring: | |
| c. | COP 42 – Shoring permit schedule delay: | 9 days |
| d. | COP 109 – Schedule delay due to tank removal: | 6 days |
| | Total Days: | 53 days |

The Audit Office discussed the approach used by the Project team to determine the correct number of days of schedule impact. Seneca indicated that a retrospective schedule delay analysis was NOT conducted due to the sequential nature of the impacts and the certainty that these delays impacted the critical path.

Project Schedule Concern #5: Seneca has solicited periodic assistance from a schedule consultant to assist with the review of Hoffman Construction Company (HCC) recovery schedules, but it does not appear that the consultant is assisting Seneca to review each monthly schedule update submitted by Hoffman.



Audit Office Opinion on Project Schedule Concerns #3, #4, and #5:

Opinion on Project Schedule Concern #3: If it were to be determined that the Library is responsible for any of the project delays and the contractor is not able to satisfactorily schedule the work so as to avoid disruptions due to weather, the Library could be at risk for contractor/subcontractor claims alleging out-of-sequence work, changed means and methods, acceleration, disruption, “changed working conditions” and inefficiency due to completing the interior work while the building is NOT closed in.. Libraries for All staff should clearly articulate to their oversight bodies the risks, costs, and benefits regarding concurrently scheduling work and shortening the time for certain work processes.

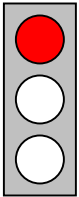
Opinion on Project Schedule Concern #4: To forecast whether available contingency is sufficient in the event that the Library is held responsible for any portion of the delays, it is essential to understand not only the duration but also the associated cost impacts to the agreed-to time delays, including an estimate of the contractor’s associated extended overhead costs for the agreed-to time delays. The Library should ensure timely and thorough reviews of the contractor’s schedule updates so as to eliminate the risk of compensating the contractor for delay days that might have resulted from contractor inefficiencies creating a concurrent delay situation. The only means of determining concurrent delay is to perform detailed schedule delay analyses, (see Concern #5 below).

Opinion on Project Schedule Concern #5: The contractor’s schedules will, at the end of the project, define the project’s as-built schedule. These schedules are used as supporting documentation for end-of-project delay claims. The Audit Office has seen that the contractor’s summary reports are not always consistent with what is shown in their schedules. The owner has the responsibility to ensure that the changes shown on the

construction schedules are acceptable and accurately portray the current project circumstances. The owner must be diligent in its review of each monthly schedule update on an ongoing and consistent basis. The owner needs to provide formal, documented comments to make sure that the dates and durations of activities shown on the schedules truly reflect the actual work performed on the project. If, at the end of the project, the owner does not agree with the contractor's schedules, it will involve a great deal of cost and effort to re-create a correct, as-built schedule through daily logs and reports in order to support the owner's assertions.

2. REMAINING CONTINGENCY (BUDGET)

The remaining project contingency as of December 15, 2002 is estimated by Seneca to be \$2.418 million. Per Seneca, the estimate of the remaining contingency is highly dependent on how close its estimates for outstanding Change Order Proposals (COPs) are to the ultimate negotiated and executed amount.



Audit Office Opinion on Remaining Contingency (budget):

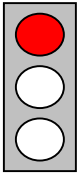
The Library cannot accurately forecast the adequacy of the contingency and ultimate cost of the project until the Library and the contractor conclude negotiations to determine responsibility for the delays to date. These negotiations are on-going. The estimated amount of the Library's remaining contingency is based on estimates for 62 percent (103 out of 165) of the outstanding COPs; Seneca has estimated 98 percent (161 out of 165) of the outstanding COPs. The estimate of the Library's remaining contingency is currently based solely on Seneca's estimates without the owner's ability to compare 35 percent (58 out of 165) of the estimates against those provided by the contractor. It is essential that the contractor provide estimates for all outstanding COPs in order for the owner to realistically assess the adequacy of its contingency and forecast project costs to completion. Without good estimates of the ultimate project cost, it is difficult to plan for additional funding or reductions in scope that may be necessary.

3. CHANGE ORDER PROPOSALS (COPs)

There were 165 outstanding COPs as of Seneca and Hoffman's COP logs dated December 15, 2002. Seneca/LFA has estimated the outstanding COPs in the amount of \$3,028,271. Hoffman has estimated only 103 of the 165 outstanding COPs. Hoffman's estimate for 103 COPs is in the amount of \$4,732,253. (See Attachment 3.) The difference between the COPs that have been quoted by HCC and the estimates provided by Seneca for those same COPs is due to COP 24, relating to unanticipated problems with the Project's excavation and shoring, the liability for which has not been established. HCC has quoted \$2.17 million and Seneca has estimated the costs at \$600,000.

COP Concern #1: The change order proposals (COPs) backlog has grown larger since QAR #4. As of May 2002 there was a backlog of 88 COPs. As of December 15, 2002, there was a backlog of 165 COPs. Of the outstanding COPs, 43.6 percent were initiated more than 120 days ago. (See Attachment 4.)

- A. **COP Concern #2:** A total of 62 COPs have not been estimated by Hoffman. Until Seneca receives a Rough Order of Magnitude (ROM) estimate from Hoffman, it is possible that Seneca's estimates will be revised. Seneca currently estimates these 62 COPs in the amount of \$368,500 (including credit COPs), whereas Hoffman carries \$0 since no estimates have been provided to the Library Project team. (See Attachment 5.)



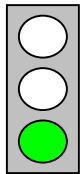
Audit Office Opinion on Change Order Proposals

Opinion on COP Concern #1: The GC/CM Contract requires the contractor to provide a cost estimate for COPs within 14 days of issuance. The Library should take measures to ensure that the contractor submits COP cost information in a timely manner.

Opinion on COP Concern #2: The estimate of the Library's remaining contingency is based on insufficient substantiation and data from the contractor. The Audit Office is particularly concerned that 44 percent of the outstanding COPs initiated more than 120 days ago remain unresolved. This suggests problems with both the contractor and Seneca regarding: 1) the change management processes in place and enforcement of the processes to meet contractual timeliness requirements; and 2) whether a sufficient amount of staffing is in place (on the parts of both the contractor and Seneca) to implement change management processes in a timely manner.

4. VALUE ENGINEERING CHANGE PROPOSALS (VECPs)

The Audit Office reviewed the backup documentation for the VECPs that have been agreed to thus far on the project to determine if these changes have lessened the quality of the project or substantially revised the intent of the design.



Audit Office Opinion on VECPs: VECPs accepted to date are consistent with the design shown to the public in May 2001 and these changes have NOT lessened the quality of the project. The majority of the changes did not affect the aesthetics of the building and will essentially be unnoticed by the public.

REVIEW #4 RECOMMENDATIONS NOT IMPLEMENTED TO DATE BUT STILL APPLICABLE

1. Review monthly schedule updates to validate HCC's schedule revisions to ensure that the changes are acceptable to the Library and that they represent actual project events/conditions.
2. Verify the primary, secondary, and tertiary project schedule critical paths monthly.
3. Validate ALL HCC's monthly schedule revisions (i.e. changes in logic, activity durations, added/deleted activities, etc.). Document discrepancies between the monthly schedule revisions reported by HCC and those that actually exist in the Primavera schedule updates.
4. Enforce Hoffman's contract terms and conditions as they relate to Change Orders and requests for time extensions.
5. Establish a change management process that requires HCC to submit COP quotations on a timely basis according to the contractual terms (the contract specifies 14 days unless mutually agreed otherwise).
6. Establish and implement policies and procedures within the Library Project team for processing COPs in terms of documentation and timeliness.

REVIEW #5 RECOMMENDATIONS

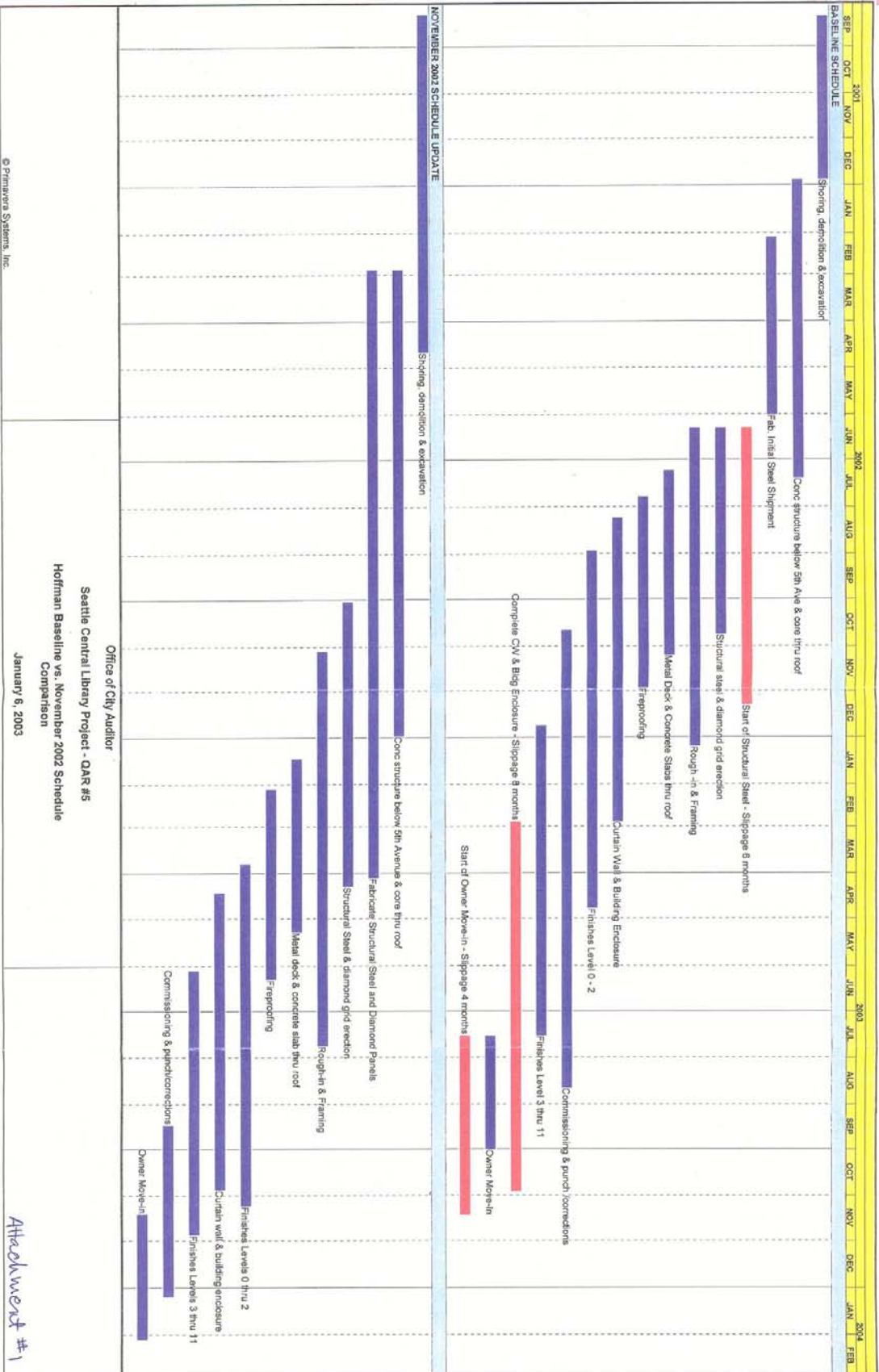
In addition to the above recommendations that were provided in Review #4, the Audit Office offers the following:

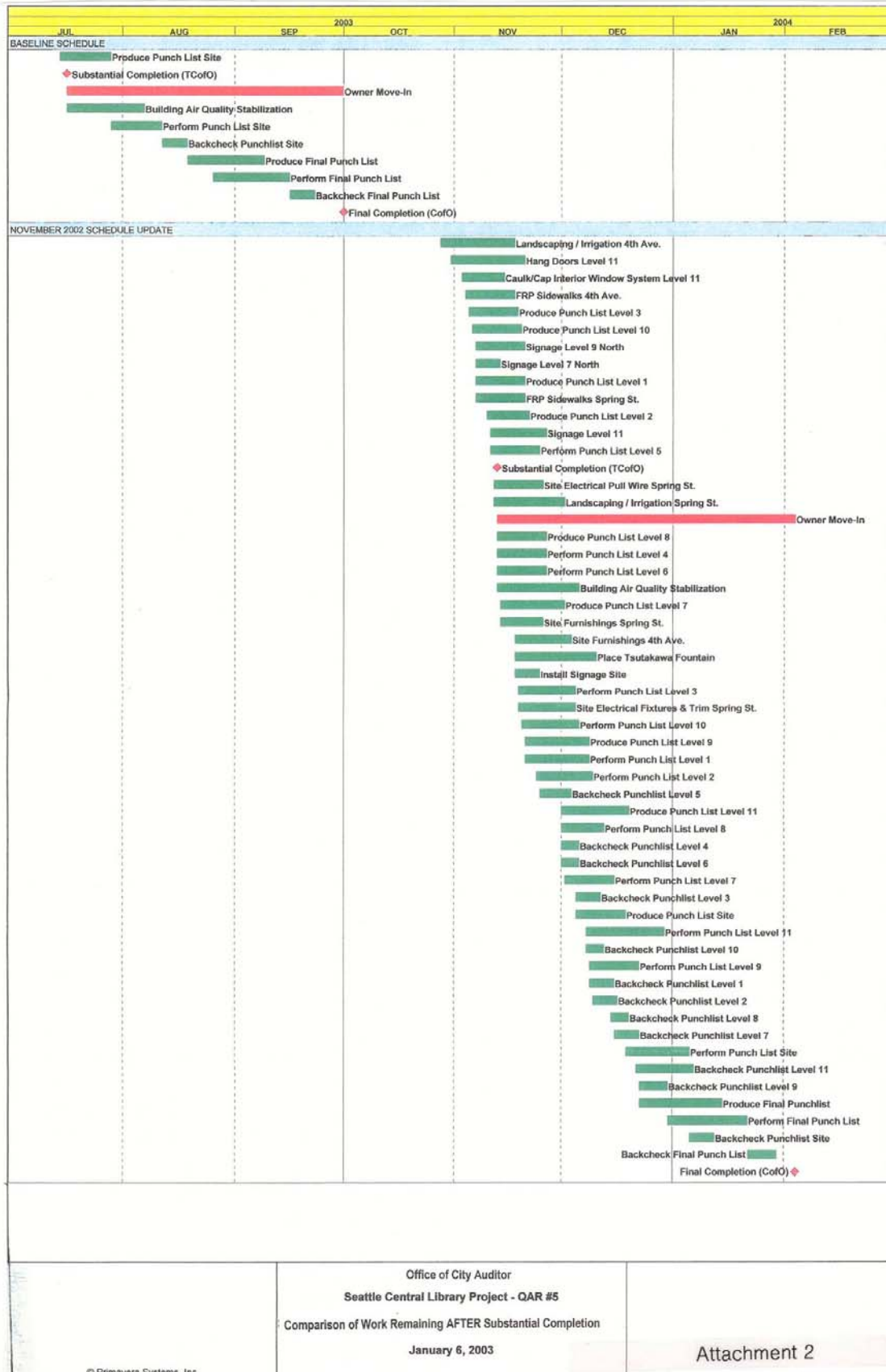
1. Require Hoffman to submit timely quotations for Change Order Proposals (COPs) to allow for better forecasting of the remaining contingency.
2. Expedite timely processing of COPs starting with credit change orders to improve the remaining contingency forecast and reduce the risk that credits will be minimized in the event of a "global" settlement of COPs.
3. Require Hoffman to submit detailed retrospective schedule analyses to validate claims for delay for all outstanding time-related COPs.
4. The Library Project team **MUST** conduct a thorough schedule analysis to segregate contractor inefficiencies/delays from owner impacts to minimize the risk of awarding Hoffman delay days for concurrent delays or contractor delays.
5. The Library Project team should provide an analysis to their oversight bodies describing the risks, costs and benefits of the contractor's current schedule as compared to the contractor's original estimate of time and sequencing required for project components.

Again, we would like to thank the Library for its cooperation and assistance in this review. If you have any questions, please feel free to contact me via e-mail or by phone at 233-1093.

cc: Deborah Jacobs, City Librarian
Mayor's Office
Councilmembers

Attachments: 1) Hoffman Baseline vs. November 2002 Schedule Comparison
2) Comparison of Work Remaining after Substantial Completion
3) Change Order Proposal (COP) Statistics
4) COP Backlog
5) Listing of COPs w/ NO Rough Order of Magnitude (ROM) or Quote
6) Library's Response to LFA QAR #5







SEATTLE CENTRAL LIBRARY
CHANGE ORDER PROPOSAL (COP) STATISTICS
 (Based on Hoffman's COP Log dated 12/15/02)

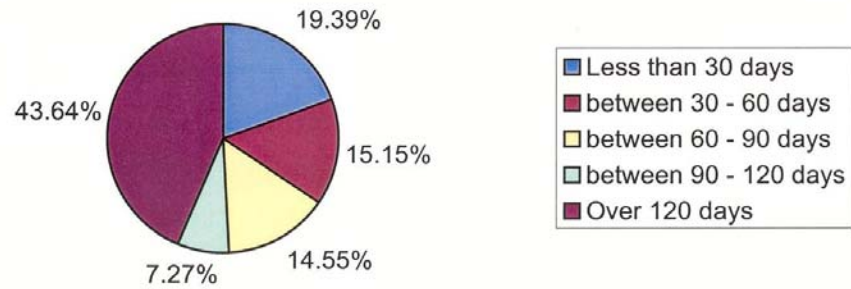
Resolved COPs: Current Status	# of COPs		Seneca Value \$	Comments
Executed	32		\$10,157,996	
Approved - Not Executed	18		\$493,462	
Voided	34		\$0	NOTE: 2 of the COPs included in the "Void" category were \$0 - no change COPs
Subtotal Resolved COPs	84		\$10,651,458	COS Paid/ To be Paid to date
Outstanding COPs: Current Status	# of COPs	Hoffman Value \$	Seneca Value \$	Comments
Initiated - No ROM, No Quote	4			No Seneca or HCC ROMs/Quotes
(Rough Order of Magnitude) ROM Estimates Only	113	\$4,031,853	\$2,327,878	NOTE: 58 of the 113 COPs estimated by Seneca have NO ROMs or Quotes by Hoffman. Total COPs w/out HCC estimates = 58
Estimate/Quotation Provided	48	\$700,400	\$700,393	
Subtotal Outstanding COPs	165	\$4,732,253	\$3,028,271	The variance is primarily due to COP 24 (Arrest movements of 5th Ave shoring). HCC estimates \$2.17M. Seneca estimates \$600K.
TOTAL COPs TO DATE	249		\$13,679,729	Total COPs Executed, Approved and Forecasted

COP Backlog	# of COPs	Hoffman Value \$	Seneca Value \$	Comments
Less than 30 days	32	\$591,105	\$285,105	
between 30 - 60 days	25	\$103,266	(\$338,734)	
between 60 - 90 days	24	\$216,629	\$305,129	
between 90 - 120 days	12	(\$373,046)	(\$327,146)	
between 120 - 150 days	13	\$162,064	\$295,063	
between 150 - 180 days	11	\$209,960	\$429,785	
Greater than 180 days	48	\$3,822,275	\$2,379,069	
Total	165	\$4,732,253	\$3,028,271	

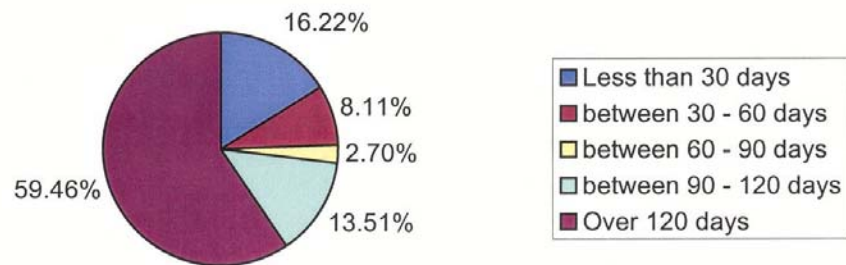
Time Related COPs	# of COPs	Hoffman Value \$	Seneca Value \$	Comments
Initiated - No ROM, NO Quote	10		\$1,250,000	
ROMs Only	17	\$2,955,500	\$1,486,200	The variance is primarily due to COP 24 (Arrest movements of 5th Ave shoring). HCC estimates \$2.17M. Seneca estimates \$600K.
Estimates/Quotation Provided	10	\$733,780	\$733,780	
Total	37	\$3,689,280	\$3,469,980	NOTE: 37 of 165 Outstanding COPs are time related per Seneca

Time Elapsed Since COP Initiated for Time Related COPs	# of COPs	Hoffman Value \$	Seneca Value \$	Comments
Less than 30 days	6	\$31,000	\$911,000	
between 30 - 60 days	3	\$15,500	\$15,500	
between 60 - 90 days	1	\$80,000	\$80,000	
between 90 - 120 days	5	\$65,722	\$75,722	
between 120 - 150 days	2	\$50,158	\$200,158	
between 150 - 180 days	2	\$0	\$210,000	
Greater than 180 days	18	\$3,446,900	\$1,977,600	
Total	37	\$3,689,280	\$3,469,980	

Total Outstanding COP Backlog



Time Related COP Backlog



Listing of Change Order Proposals (COPs) w/ NO Rough Order of Magnitude (ROM) or Quote from Hoffman Construction

DRAFT

1/25/2003

	COP #	Description	Status	Date Initiated	Hoffman ROM	Seneca ROM	Hoffman Accepted Value	Seneca Negotiated Value	Hoffman Executed	Seneca Executed
1 T	193	TEC/Canron Schedule Issue	I	10/28/2002		not included				
2	077	Deletion of HVAC circuitry/relocate surface devices [credit]	I	5/14/2002		\$0				
3	108	Value engineering & cost reduction	I	6/11/2002		\$0				
4	135	Door/Door Hardware Revisions, Spec Alignment for BP 8	I	7/29/2002		\$0				
5	141	Arch revisions for addendum BP-8	I	8/15/2002		\$0				
6	144	Bookshelf revisions (Option E)	I	8/15/2002		\$0				
7	155	Headquarters level revisions	I	9/6/2002		\$0				
8	186	Revisions to Arch concrete curbs at storefront	I	10/17/2002		\$0				
9	191	Owner requested Toilet partition revisions	I	10/24/2002		\$0				
10	195	Installation/protection of Ann Hamilton floor	I	10/29/2002						
11	198	Owner requested Toilet partition revisions	I	10/30/2002		\$0				
12	199	Change Elevator LED Displays to Manual	I	10/31/2002		\$0				
13	200	Phase 3 permit corrections	I	10/31/2002		\$0				
14	211	Electrical VE Options	I	11/8/2002						
15	213	Door Revisions - Remove Acoustic Requirements	I	11/8/2002		\$0				
16	217	Electrical & Data Floor Box Locations	I	11/18/2002		\$0				
17	218	Security System Revisions	I	11/18/2002		\$0				
18	221	MEP Painting Voluntary Alternate	I	11/18/2002		(\$427,000)				
19	232	Seal Weld Exposed Joint on E3	I	11/27/2002		\$30,000				
20	249	Alternate A4 - Change Elev. Penthouse Siding	I	12/11/2002						
21 T	118	Added concrete wall at Level 2 - 3 C-line,	R	7/8/2002		\$10,000				
22 T	119	Architectural Revisions	R	7/8/2002		\$200,000				
23 T	140	Repaving 5th Avenue	R	8/7/2002		\$150,000				
24 T	148	Level 12 framing for skylight deletion	R	8/28/2002		\$10,000				
25 T	230	Schedule Impacts to Concrete Work	R	11/26/2002		\$810,000				
26 T	237	Ridge Plate Connections at Node Points	R	12/4/2002		\$30,000				
27 T	238	Seismic S3 Connections to Truss Chords	R	12/4/2002		\$40,000				
28	105	Fire Protection & Electrical conductors spec. rev.	R	6/11/2002		\$10,000				
29	110	Delete beams/add rebar at HT 12 brace conflict	R	6/17/2002		\$1,000				
30	120	Misc. MEP/Fire Protection & Security revisions	R	7/9/2002		\$5,000				
31	122	Extend Auditorium wall to match auditorium slab	R	7/10/2002		\$5,000				
32	143	Gutter heat trace	R	8/15/2002		\$50,000				
33	146	Unistrut embeds for book conveyor	R	8/21/2002		\$5,000				
34	147	Add of metal lockers/VE Fall protection	R	8/28/2002		\$30,000				
35	151	Deletion of opening at Level 03 slabe near grid G8	R	9/3/2002		\$1,000				
36	163	Revisions to smoke exhaust fans	R	9/19/2002		\$60,000				

Listing of Change Order Proposals (COPs) w/ NO Rough Order of Magnitude (ROM) or Quote from Hoffman Construction

DRAFT 1/25/2003

	COP #	Description	Status	Date Initiated	Hoffman ROM	Seneca ROM	Hoffman Accepted Value	Seneca Negotiated Value	Hoffman Executed	Seneca Executed
37	171	Minor Architectural Revisions	R	10/2/2002		\$2,000				
38	172	Revised stair 1 and 2 dwgs/specs	R	10/4/2002		\$10,000				
39	174	Smoke exhaust fans	R	10/4/2002		\$5,000				
40	175	Revised detail 20/S812	R	10/4/2002		\$5,000				
41	178	New spec section for chain link fence	R	10/11/2002		\$500				
42	179	Mechanical revisions SE corner of Level 08	R	10/11/2002		\$1,000				
43	183	Revisions to grating at N&W perimeter of level 03	R	10/15/2002		\$5,000				
44	192	Dispute Review Board costs	R	10/28/2002		\$10,000				
45	202	Scope for Wire Rail at North Mech Wall	R	10/31/2002		\$10,000				
46	205	Stair 1 Modification at Elev. Machine Room	R	10/31/2002		\$15,000				
47	207	Owner Requested Changes Lvl. 02 & 04	R	11/5/2002		\$10,000				
48	210	Misc. MEP Revisions	R	11/7/2002		\$35,000				
49	212	Mechanical VE Options	R	11/8/2002		(\$547,000)				
50	215	Additional Detailing for Seismic Grid Nodes	R	11/8/2002		\$25,000				
51	219	Steel Framing Revisions Lvl 11 to MEP	R	11/18/2002		\$15,000				
52	222	Steel Framing Revisions Lvl 4 for MEP	R	11/18/2002		\$10,000				
53	224	Metal Wall Panel/ Diffuser Details	R	11/21/2002		\$15,000				
54	229	DAS Radio Design /Build	R	11/26/2002		\$5,000				
55	239	Relocate Shear Tabs Framing Mech. Openings	R	12/4/2002		\$15,000				
56	241	Premium to Apply Sealer to Core Walls	R	12/5/2002		\$0				
57	242	Peephole Arts Project	R	12/9/2002		\$500				
58	243	Revise Door Hardware, Door #480	R	12/9/2002		\$500				
59	245	Costs for Water Damage to Insulation/Drywall	R	12/9/2002		\$0				
60	246	Alternate A9 - Polycarbonate Ceiling	R	12/11/2002		(\$238,000)				
61	247	Alternate A2 - MWP2 at Lvl. 4	R	12/11/2002		(\$53,000)				
62	248	Alternate A6 - Dry Erase Board	R	12/11/2002		(\$8,000)				
						\$368,500				



The Seattle Public Library

Memorandum

Date: February 11, 2003

To: Susan Cohen, City Auditor

From: Alex Harris, Capital Program Director

Subject: Comments from The Seattle Public Library and The Seneca Group on QAR #5

These comments are based on a draft of Quality Assurance Review #5 received February 7 from the Office of the City Auditor.

The Library is in agreement with the Office of City Auditor (OCA) that the schedule for completing the Central Library has been delayed, and that the construction sequence now planned is more aggressive, with a greater reliance on concurrent activities than the original schedule. We also agree that a large complex project like the Central Library presents risks to the Library and the City, and that good project management and assessment of risks are critical to our stewardship of the bond resources, and to protect the City's and Library's interests.

Where we may differ is in our assessment of some of the measures used to manage construction challenges and problems that arise in every large construction project, including this one. The most significant challenges the project has faced are delays and costs associated with problems with the excavation and shoring phase of work, and delays and costs associated with delays in the steel detailing and fabrication.

While we planned to open the building in 2003, with early schedules considered dates from early August to early October, the original schedule allowed for the possibility of delays associated with construction. Our lease for our temporary library space, for example, extends through December 19. This date was established to recognize the possibility of delays. In addition, we believe the move-in of approximately 950,000 books and resources can be completed in a deliberate and sequential order in six weeks. Our current schedule allows for the book move-in to begin by November 1. Similarly, testing of building systems, or commissioning, is also scheduled to begin November 1. Staff is now expected to move in December 10, before our temporary lease agreement expires, with a public opening three to five weeks later. There are certainly many events that could occur in the time between now and December, which could impact these expectations.

This schedule is by no means a preferred option to the original, planned schedule. Punchlist work on finishes is expected to take place after staff are in the building. Hoffman and the Library, working through its project management team at The Seneca Group, believe this altered sequence of construction activity and move-in is preferable to further delay in the project. If further delay were the responsibility of the Owner, the costs of such delay would be substantial, including the costs of the Contractor and subcontractor overhead, project management contract costs, architectural costs, and other Library impacts. Hoffman has committed to this revised schedule as we continue to examine issues of responsibility for delays to the project. On the Contractor's side, Hoffman is subject to Liquidated Damages of \$10,000-\$16,000 per day (different amounts for different degrees of delay) for delays that are determined to be its responsibility.

Some examples of the planning Hoffman is doing to adhere to the work schedule are:

- 1) Anticipating nighttime loading of materials into the building to reduce conflicts in material handling when many subcontractors are at work during the day;
- 2) Planning for tent-like areas of weather protection to allow interior work to progress before the glass curtain wall is complete;
- 3) Working intensively with Canron (the steel fabricator), BDS (the steel detailer), and TEC (the steel erection subcontractor), to accelerate the pace of steel production to ensure remaining steel erection progresses without delay; and
- 4) Examining, with the architects and engineers, alternative sequences of steel and concrete work that allow for more rapid progress.

Some examples of steps the Library is taking to improve our confidence this schedule will work for us at move-in are:

- 1) Detailed planning of furniture and equipment acquisition, including determining anticipated lead times for these purchases;
- 2) Review of each staff work area to ensure precise space plans that avoid last minute changes, which might impact construction completion or move-in;
- 3) Planning for the process to select the move contractor;
- 4) Work using a team of Library staff members to review problems with an electronic material handling system that occurred at a recent opening of the new library in Eugene, Ore., with a goal of avoiding these problems in our system; and
- 5) Tagging of Library materials now to ensure the circulating collection is ready for the electronic material handling system.

Many of the tasks associated with meeting the construction schedule commitments require enormous cooperation among the Library, Hoffman and its subcontractors. They require good will and good intentions, as well as careful attention to schedules, costs, and contract obligations. Working closely with seasoned construction management professionals at The Seneca Group, we at the Library are carefully assessing the relative risks and exposures present in the project. We regularly update Library Board stewards for the project with information about the schedule and progress. We have involved the City's legal counsel and special legal advisors under contract to

the Library to consult with us on the approaches being taken to determine responsibility for delays, and the timing and appropriateness of steps being taken to resolve open issues.

We agree with the OCA that Hoffman and the Library should make a vigorous effort to resolve open Change Order Proposals. We believe The Seneca Group's analysis of schedules for the project has been responsible, and that the special scheduling consultant working with Seneca is providing added depth to the schedule review process. We agree with the OCA that schedule issues and the responsibility for schedule changes will be critical in assessing responsibility for project delays. The choice the Library has made in recent months has been to work intensively to resolve the steel delays, and to investigate the causes and circumstances of the shoring delays, since these two major issues had significant impact on the schedule. We support renewed attention to resolving the majority of the outstanding change orders.

The final recommendation of the draft report recommends providing an analysis of risks, costs, and benefits of the current schedule to our oversight bodies. The Library Board, through the two Board stewards assigned to the Central Library project, received detailed schedule briefings from the Contractor in August and in January, as well as weekly updates on progress, contingency status and challenges. We will be meeting with the Library Oversight Committee (LOC) members in April and will share the schedule information and status of the project with its members. We meet with the Citizen Implementation Review Panel (CIRP) monthly.

The CIRP is aware of the upcoming report and the subjects being reviewed. We provided all three bodies with copies of the QAR 4, and will make the latest report available to them when it is issued. The monthly report provided to the OCA is also provided to the Library Board, and CIRP in the monthly meeting packet. We would be glad to include in upcoming presentations to these bodies further depth of information on the current schedule and its risks, costs, and benefits.

The Quality Assurance Review places great, and appropriate emphasis on the management of Change Order process and schedule in minimizing risk for this project. We commit to a goal of substantial improvement in the outstanding Change Order proposals, and to careful analysis of schedules to understand fully the steps necessary to complete the project, to establish our confidence that the schedule is realistic, and to assess claims and responsibility for delays.

We believe there are many other important aspects of managing a large and complex project for which we also bear responsibility. We would include in these:

- Maintaining a positive commitment to project completion on the part of all parties,
- Keeping focus on results, and responsiveness when problems are encountered in the work,
- Being willing to do our part, whether through enhanced turnaround time on architect or engineer review of shop drawings, or timely processing of pay requests.

The staff, consultants and Library Board members involved in managing the Central Library project are prepared to meet with the OCA or City Council members involved in the review of

Comments from The Seattle Public Library and The Seneca Group on QAR #5

February 11, 2003

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this audit to answer questions or provide further information about the project and the subjects discussed in the review.

cc: Deborah L. Jacobs, City Librarian
Bob Goldstein, Chief Financial Office, Seattle Public Library
Donnie Grabowski, LFA Finance & Management Analyst
Craig Norsen, The Seneca Group
Tim Morrison, City Budget Office

Office of City Auditor's Report Evaluation Form

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Your feedback helps us do a better job. If you could please take a few minutes to fill out the following information for us, it will help us assess and improve our work.

* * * * *

Report: **Libraries for All Quality Assurance Review #5 Central Library**

Release Date: February 13, 2003

Please rate the following elements of this report by checking the appropriate box:

	Too Little	Just Right	Too Much
Background Information			
Details			
Length of Report			
Clarity of Writing			
Potential Impact			

Suggestions for our report format: _____

Suggestions for future studies: _____

Other comments, thoughts, ideas: _____

Name (Optional):

Thanks for taking the time to help us.

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